

## **ARCHITECTURAL HISTORICAL PROGRAM**

### **Pre-World War II**

In response to growing world tensions, Congress approved funds in April 1941 for the construction of an additional Army chemical production facility to supplement the Chemical Weapons Service's only chemical manufacturing plant at the Edgewood Arsenal in Maryland. Huntsville was chosen as the location for the CWS arsenal over the other competitors because it possessed 33,000 "reasonably priced" acres, excellent transportation facilities, labor conditions, a power supply from the TVA, operating personnel and raw materials, fuel, water, a good climate and living conditions, and sewage disposal. It was responsible for producing a wide range of toxic chemicals, incendiaries, smoke munitions, and protective clothing. Ground was broken at the Huntsville facility on August 4, 1941 and the first production line began operating on February 28, 1942.

Only two pre-World War II structures remain on Redstone. Building 8012, the Harris Home has been recommended eligible for the National Register of Historic Places (NRHP).



**Harris Home 1941**



**Harris Home 1980s**

### **World War II**

During the Second World War, what is now Redstone Arsenal was actually three separate installations, all of which were devoted to the production and storage of chemical warfare materials. The first of these three was Huntsville Arsenal, established in July of 1941, under the auspices of the Chemical Warfare Service. Also run by the Chemical Warfare Service was the Huntsville Depot, later called the Gulf Chemical Warfare Depot. The third installation, established in the fall of 1941, was originally known as the Redstone Ordnance Plant, and was later renamed "Redstone Arsenal." The Arsenal was operated by the Army Ordnance Department.



At the close of the war, all the ordnance lines in Redstone Arsenal were shut down and all plants in Huntsville Arsenal were placed in "standby storage" in August 1945. The Gulf Chemical Warfare Depot was renamed Gulf Chemical Depot on August 2, 1946. It was then abolished on January 15, 1947, and its functions were transferred to Huntsville Arsenal.

In recent years, efforts have been made to preserve or at least document key physical elements of the World War II heritage remaining at Redstone Arsenal. This has been complicated by the use and modification of the facilities in the decades since the war. Only a few areas retain enough original integrity to be eligible for the NRHP. Five areas within Redstone Arsenal have been recommended eligible for the NRHP as historic districts.

1. Huntsville Arsenal Plant Area 2 H (Mustard Gas) Line
2. Huntsville Arsenal Plant Area 2 Carbonyl Iron Unit
3. Redstone Arsenal North Plant Line 2
4. Redstone Arsenal South Plant Line 3
5. Gulf Chemical Warfare Depot (GCWD) Igloo Area 2



GCWD Igloo Area II Building 8940



WW II GCWD Igloo Area II

## **Cold War**

Even though the official activation did not occur until June 1, 1949, the U.S. Army's Chief of Ordnance designated the Redstone Arsenal as the Center for Ordnance Rocket Research and Development in October 1948. The Huntsville Arsenal ceased to exist as a separate installation on June 30, 1949 and it officially became part of the Chemical Division of Redstone Arsenal. Along with its rocket mission, the Redstone Arsenal also continued to produce chemical ammunition from July 1951 to July 1956.



REDSTONE

During the 45 years of the Cold War, from roughly 1946 to the collapse of the Soviet Union in 1991, Redstone Arsenal had an important role to play in the development of the nation's rocketry, both for defense and for space exploration. It was at Redstone that the Hermes missile was developed, as well as the later REDSTONE short-range missile and the JUPITER intermediate range ballistic missile (IRBM) that formed this country's main missile deterrent until the deployment of intercontinental ballistic missiles (ICBM) in the early 1960s.



Redstone was also the center of rocket research for space exploration in the days before NASA. Thus, the period of greatest Cold War significance at Redstone Arsenal is from 1950 to the early 1960s.

In 1950 over 125 German scientists, previously spirited out of Europe by Operation Paperclip, arrived at Redstone Arsenal. Under the direction of Colonel Holger Toftoy, this team, led by Wernher von Braun, was put to work perfecting the Hermes missile based on designs from old V-2 rockets left over from World War II. In the early 1950s, the nerve center of this research was located in the administrative buildings of the Old Huntsville Arsenal.



Medaris, von Braun, Toftoy

An ordnance school was also established on post which opened in 1952. Originally designated the Provisional Redstone Ordnance School, it was later renamed the U.S. Army Ordnance Guided Missile School. Its mission was to train military and civilian personnel in the inspection, supply and maintenance of guided missiles, as well as missile propellants and equipment. In the 1950s, this school was the only missile training facility in the entire U.S. military complex.



OMMCS Area 1950s



OMMCS Area 1959



OMMCS Area 1956

The U.S. Army made its most valuable contributions to space research from January 1950 to August 1962. During this period, the Army placed four earth satellites into orbit; launched the free world's first lunar probe and first solar satellite; launched three primates into space; initiated the effort on a 1.5 million-pound-thrust booster being

designed for lunar exploration vehicle; and began work on the launch vehicle to carry the first men into space. When NASA was created in July 1958, the Army's role in space research gradually diminished. In 1960, the core of the rocket research facilities at Redstone was separated from the Army and given to NASA under the name "George C. Marshall Space Flight Center" (MSFC). MSFC was created in the center of Redstone Arsenal and is the only NASA center located within an Army post.

Redstone Arsenal had an important role to play in both the Cold War and the Space Race, primarily because of its involvement in missile research.

The Cold War properties that have been recommended eligible for the NRHP as districts are:

1. Guided Missile Center Historic District
2. Ordnance Guided Missile School Historic District
3. Test Area 5 Static Test Stand and Control Building/Blockhouse Historic District

The Cold War properties that have been recommended individually eligible for the NRHP are:

1. 4381 – Manufacturing Plant
2. 4484 – Administration
3. 4488 – Army Ballistic Missile Agency Headquarters, Developmental Operations, Offices (Wernher von Braun and Major General John Medaris)
4. 4489 – Technical Photo and TV Laboratory
5. 4505 – Administration
6. 7120 – Ordnance Missile Laboratories and Rocket Development Group/Rocket Auditorium
7. 7625 – Motor Propellant Casting/Patriot Missile Motor Casting Building



**Building 4505 in 1959**



**Building 4488 in 1959**



**Rocket Auditorium, Building 7120**